

Case 3624**A proposal for the rejection of 38 names in ANTHICIDAE (Coleoptera)**

Miguel A. Alonso-Zarazaga

Departamento de Biodiversidad y Biología Evolutiva, Museo Nacional de Ciencias Naturales (CSIC), Cl. José Gutiérrez Abascal, 2, E-28006 Madrid, Spain (e-mail: zarazaga@mncn.csic.es)

Abstract. The purpose of this application, under Articles 11.8, 11.8.1, 78.2.3 and 81 of the Code, is to confirm the unavailability of 23 names published by Marseul in 1879, one name published by Pic in 1892, one name attributed to Pic in 1911 and one name used by Kreckich-Strassoldo, 1919. These names have been incorrectly put in use by Chandler, Nardi & Telnov in 2004, in place of the correct use of names proposed by Pic and Sahlberg. The original names were French vernacular plurals for species-group names in a French text and cannot be converted into singular by application of Article 11.8.1. The incorrectly proposed names have destabilized a nomenclature settled for more than one century. Twelve other names proposed by Pic and Sahlberg that are junior objective synonyms should also be rejected. *Anthicus pumilus* Baudi, 1877 is designated as type species of *Tenuicomus* Pic, 1894, *A. rufivestis* Marseul, 1879 is designated as type species of *Trapezicomus* Pic, 1894 and *Notoxus bimaculatus* Illiger, 1801 is designated as type species of *Laticomus* Pic, 1894.

Keywords. Nomenclature; taxonomy; Insecta, Coleoptera; ANTHICIDAE; ant-like flower beetles.

1. The family ANTHICIDAE Latreille, 1819 or ‘ant-like flower beetles’ is a moderately small family of Coleoptera, containing 101 genera and over 3,000 species. The family is cosmopolitan and shows a relatively wide sample of ways of life in both adult and larval states (Chandler, 2010). Its type genus is *Anthicus* Paykull, 1798 (p. 253), whose type species is *Meloe antherinus* Linnaeus, 1760, by subsequent designation of Westwood (1830, p. 59).

2. The family attracted attention of LaFerté-Sénéctère, who, after several contributions, produced a preliminary monograph (LaFerté-Sénéctère, 1849a) and later the same year, completed it as a single volume (LaFerté-Sénéctère, 1849b). Also Mulsant & Rey (1866a) treated the French representatives in a book, whose text appeared also as an article a few months later (1866b). One of the new subgenera of *Anthicus* that they proposed was *Cyclodinus* (1866a, p. 77) for two species, *Anthicus humilis* Germar, 1824 and *A. longipilis* C. Brisout de Barneville, 1863, of which the former was designated as its type species by Bonadonna (1949, p. 57).

3. Thomson (1864, p. 366) described the new genus *Eonius* and designated as type species *Notoxus bimaculatus* Illiger, 1801.

4. Desbrochers des Loges (1868, p. 79) described a new species of ANTHICIDAE from Bône (now Annaba, Algeria) as *Formicomus oliverii* and conditionally proposed (p. 80) a new genus for it, *Pseudantichus*.

5. Chevrolat (1877, p. 168) proposed the new subgenus *Microhoria* and included in it four Algerian species. One of these, *Anthicus oedipus* Chevrolat, 1860, has been designated as type species by Bonadonna (1952, p. 234).

6. Marseul (1879a) revised the components of the family ANTHICIDAE (naming it a tribe) in the Old World. This work was published in 9 'livraisons' (Marseul, 1879b), but for the moment it has been impossible to know the contents and date for each one. He gave descriptions for all taxa in the family, genus and species groups that were known to him and reproduced those that were unknown to him. Genera and species were separated with the aid of keys. In his treatment of genus *Anthicus*, he introduced 19 species-groups to separate the 178 species of this genus known to him, with the words: 'Ces espèces, nous les répartissons en 19 groupes, aussi naturels que possible: le tableau qui suit permettra de reconnaître auquel de ces groupes chacune des espèces doit se rapporter' ['I divide these species into 19 groups, as natural as possible: the following key will allow the recognition of every group to which each species must belong']. In this key, the 'Tableau synoptique des groupes du genre *Anthicus*' (pp. 65–68), his new names are written as follows:

- p. 65 I. LEPTALEUS (EPHIPPICOLLES) (*Rodriguesi*)
 II. STENIDIUS (STENICOLLES) (*vittatus*)
 p. 66 III. SULCICOLLES (*giganteus*)
 IV. RECTICOLLES (*inderiensis*)
 V. LAGENICOLLES (*humilis*)
 VI. BITUMICOLLES (*turca*)
 VII. TRAPEZICOLLES (*floralis*)
 VIII. CORDICOLLES (*instabilis*)
 IX: STRICTICOLLES (*longicollis*)
 X. CLAVICOLLES (*longiceps*)
 p. 67 XI. HIRTICOLLES (*4-guttatus*)
 XII. BREVICOLLES (*antherinus*)
 XIII. TENUICOLLES (*olivaceus*)
 XIV. PUBICOLLES (*axillaris*)
 XV. BIRRICOLLES (*Genei*)
 VI. [lapsus for XVI] LIPARODERUS (ROTUNDICOLLES) (*insignis*)
 XVII. LATICOLLES (*baikalicus*).
 XVIII. FOSSICOLLES (*Ghilianii*)
 * MONSTROSIPEDES (*varus*)
 p. 68 ** NORMALIPEDES (*andalusicus*)
 XIX. AULACODERUS (BIPARTICOLLES) (*Friwaldskyi*).

All his species-group names ended in -colles, much in the way of the names adopted by Mulsant for the Coleoptera groups in his *Histoire Naturelle des Coléoptères de France* (Angusticolles, Gibbicolles, Scuticolles, etc.). In some instances, they were placed between parentheses and preceded by generic names made available by former authors, in such a way that he was giving precedence to these names over his own, namely for groups I, II, XVI and XIX he respectively used *Leptaleus* LaFerté-Sénéctère, 1849 (type species *Notoxus rodriguezii* Latreille, 1804 by original designation), *Stenidius* LaFerté-Sénéctère, 1847 (type species *Anthicus vittatus* Lucas, 1843 by monotypy), *Liparoderus* LaFerté-Sénéctère, 1849 (type species *Anthicus insignis*

Lucas, 1843 by original designation) and *Aulacoderus* LaFerté-Sénéctère, 1849 (type species *Anthicus transversalis* LaFerté-Sénéctère, 1849 by original designation, a junior homonym, replaced with *Anthicus mutatus* Gemminger, 1870). This clearly indicates that he intended them to be at a lower rank than the subgenus. He also divided group XVIII into two subgroups. In his treatment of the species of *Anthicus* (pp. 68–234), he used as the leading name his own species group name in bold face, and in those groups having an alternative LaFerté-Sénéctère's name, appending it preceded with the abbreviation 'S.-G.' (Sous-Genre, i.e., Subgenus). However, in each species treatment, he placed in parentheses between the genus name *Anthicus* and the species name only LaFerté-Sénéctère's names, so that only species names in groups I and II bear a correctly placed subgeneric name, while those in groups XVI and XIX bear no interpolated name. Some spellings or names changed from the key proposed on pp. 65–68 by the addition of a French acute accent: the word for group V was LAGÉNICOLLES (p. 79), that for group VII was TRAPÉZICOLLES (p. 100) and inexplicably the name for group XVIII was modified to BIFOSSICOLLES (p. 187) (while commenting its identity with genus *Microhoria* Chevrolat, 1877, and offering a key where the names MONSTROSIPEDES and NORMALIPEDES were not used, giving instead the marking by one or two asterisks). Moreover, the name of group XIX on p. 230 was also modified into BISSICOLLES. In the 'Explications des planches' (p. 257), the following names are mentioned: '*Anthicus (Leptaleus) Rodriguesi* Latr.', '*Id. (Lagenicolles) humilis* Germar', '*Id. (Stenidius) tenuipes* Laf.', '*Id. (Cordicolles) instabilis* Schmidt', '*Id. (Laticolles) sellatus* Panz.', '*Id. (Bifossicolles) nectarinus* Panz.', '*Id. (Hirticolles) 4-guttatus* Rossi', '*Id. (Birricolles) Genei* Laf.' and '*Id. (Tenuicolles) olivaceus* Laf.'.

Some authors have cast doubt on whether these new names of Marseul had a subgeneric rank or were just names for species-groups, as he admitted, and also on which language they were proposed in. The names look Latin, but the presence of acute accents on some of their appearances in the text allow the suspicion that they were intended as vernacular French names. Under Article 10.4, these names were proposed as 'species-groups', i.e., for an 'aggregate of species', and cannot be deemed to be genus-group names, even if they were placed in some cases between parentheses after a genus, e.g. in the 'Explication des Planches'. Moreover, either in French or in Latin, these names are plural, and not singular. In Latin, adjectives derived from Latin noun *collum* (neck) get the form *-collis*, with the modificative part in front, as a prefix, and with an *-i-* as a joining vowel, e. g., the classical adjective *parvicollis* (short-necked). The same reasoning is to be applied to the adjectives derived from Latin noun *pes* (foot), which get the form *-pes* and belong to the 3rd adjectival Latin declension, as the classical adjectives *aeripes* (bronze-footed) or *celeripes* (swift-footed). Since *Anthicus* is masculine, the groups of species belonging to this genus are also deemed to be masculine, and the nominative plural of masculine adjectives of the 2nd adjectival Latin declension ending in *-collis* ends in *-colles* and those of the 3rd ending in *-pes* end in *-pedes*. So, if these names are deemed to be Latin, they are masculine plural nominalized adjectives, and according to this evaluation, they are unavailable since they do not meet the requirements of Article 11.8 of the Code, which specifically requests that the names 'must be, or be treated as, a noun in the nominative singular'. There is no word in Latin ending in *-colles* that is singular. On the other hand, even if these names are deemed to be vernacular French used as

Latinized words and are allowed by Article 11.3, they are still plural forms (as the –s at the end shows, being the common plural mark in French) and are still excluded from availability by Article 11.8. Their conversion to nominative singular nouns to make them available is prevented by Article 11.8.1, which states that this can be done only if they are published in a Latin text, which is not the case, Marseul's work being written in French.

7. Marseul (1887) used his former names as subgenera of *Anthicus*, placing LaFerté-Sénectère's names in synonymy (Ephippicolles = *Leptaleus*, Stenicolles = *Stenidius*, Rotundicolles = *Liparoderus* and Biscissicolles = *Aulacoderus*). He did not use Fossicolles and Biparticolles, replacing these with Bifossicolles and Biscissicolles.

8. Pic (1892, p. 44) proposed a new group of *Anthicus* following Marseul's division system, with the words: 'Cette espèce que je n'ai pas su faire rentrer dans aucun des groupes de de Marseul, me paraît devoir tenir la tête d'une division nouvelle: *Curticolles*' in French and 'Es ist mir nicht möglich gewesen, diese Art in irgend eine der von Marseul'schen Gruppen einzuordnen; und es scheint mir, dass sie vornan in eine neue Gruppe, 'Die *Curticolles*' placiert werden muss.' in German [translation: This species that I have been unable to place in any of the groups of de Marseul, seems to me to head a new division: the *Curticolles*.]. This name, proposed as a division for the only new species *Anthicus trotommidens* Pic, 1892, and preceded by the plural definite article in the German version, is evidently to be considered a vernacular name, in the same category as Marseul's names.

9. Pic (1894a, p. 41, February) rejected Marseul's names as being vernacular French and latinized several (but not all) of these with a variation of ending to –*comus* (perhaps simply in to the manner of another Anthicid genus, *Formicomus*), with the words: 'J'ai cru bon de latiniser les coupes de De Marseul, . . .' [I have considered it desirable to latinize De Marseul's divisions, . . .]. Thus, these are newly created names and not replacement names, since unavailable names cannot be replaced (Article 12.2.3). Ten of these names took the first two syllables from Marseul's vernacular names. They were: in the key, without included species except for *Tenuicomus*, the divisions *Birricomus*, *Hirticomus*, *Curticomus* and *Laticomus* (p. 41) and *Pubicomus*, *Sticticomus*, *Clavicomus*, *Brevicomus*, *Tenuicomus* (2 spp.), *Trapezicomus* and *Cordicomus* (p. 42), and in the text, with included species, *Birricomus* (3 spp.) (p. 43), *Cordicomus* (6 spp.) and *Trapezicomus* (5 spp.) (p. 45), *Brevicomus* (18 spp.) (p. 46), and *Pubicomus* (7 spp.) (p. 48). In the continuation of his catalogue (Pic, 1894b, March) treated again *Hirticomus* (2 spp.) and *Tenuicomus* (p. 69), *Clavicomus* (8 spp.) and *Stricticomus* (4 spp.), correcting the original *Sticticomus* (p. 70), and *Laticomus* (2 spp.) (p. 71). *Curticomus* (p. 76), apparently being an emendation of *Curticollis* Pic, 1892 to match the selected ending of the other names, even if not overtly stated so, is not based on any of Marseul's names and is here considered a completely new description (type species by monotypy *Anthicus trotommidens* Pic, 1892 (as *trotommideus*, an incorrect subsequent spelling). The original spelling *Bissicomus* on p. 41 and 43 was corrected in the Errata (p. 79) to *Birricomus*. No type species were designated.

10. Pic (1895, p. 92) used *spinicornes* as an adjective to qualify some species of *Anthicus* belonging to two different subgenera (*Cyclodinus* and *Brevicomus*), having in common a peculiar dorsal tooth on the dorsum of the antennal scape. The exact words used were: ' . . . je ne crois pas inutile de donner l'énumération des espèces que

j'ai reconnues *spinicornes* (il peut s'en trouver d'autres encore non nouvelles) et que j'ai rapprochées pour cela bien qu'elles fassent partie de deux groupements différents, celui des *Cyclodinus* et celui des *Brevicomus*. [Translation: . . . I do not think it useless to give a list of the species I have recognised as having the antennae spined (maybe there are still some others which are not new) and that I have brought closer because of this even if they belong to two different groups, that of *Cyclodinus* and that of *Brevicomus*.]. This is an emphasized plural adjective in a French sentence, in lowercase, constituting no scientific name that could be taken, as is the case for Marseul's names, either as a plural vernacular French name or as a plural Latin compound adjective, being in both cases unavailable (Article 11.8). This name has been considered unavailable by later authors and only Krekich-Strassoldo (1919, p. 65) commented on its use by Pic: '... und die er *Spinicornes* oder *Spinifères* benennt' [Translation: . . . and which he called *Spinicornes* or *Spinifères*.]. He did not use it as an available name, kept the original French grave accent but capitalised the words.

11. J.R. Sahlberg (1903a) was the first to use what apparently seem to be nominative singular versions of Marseul's plural names, as subgenera of *Anthicus*. They were: *Lagenicollis* (pp. 66–67, 5 species included), *Trapezicollis* (p. 67, type species by monotypy *Meloe floralis* Linnaeus, 1758), *Cordicollis* (p. 67, type species by monotypy *Anthicus instabilis* Schmidt, 1842), *Stricticollis* (p. 67, two species included), *Hirticollis* (p. 67, type species by monotypy *Notoxus hispidus* Rossi, 1792), *Brevicollis* (p. 67, 4 species included) and *Birricollis* (p. 67, type species by monotypy *Anthicus genei* LaFerté-Sénéctère, 1849). These names are available under the general requirements of Article 11. They lack any reference to Marseul's work (which is only mentioned as a general reference for the family) or to a possible intent of Sahlberg to amend them, so they must be taken as new names proposed by this latter author. Although descriptions are lacking, the indications required by Article 12.2 are furnished since there is at least one available specific name included in every proposed subgenus. Even if the issue of the *Öfversigt af Finska Vetenskaps-Societetens Förhandlingar* for 1902–1903 (nr. 45) seems to have been published as a single volume at the end of the Finnish financial year, it was usual that the authors received reprints of their articles as soon as they were available, advancing thus the publication date (H. Silfverberg, pers. comm.). I have been unable to check this situation.

12. J.R. Sahlberg (1903b) used some of the previously proposed subgenera and added a new one, *Pubicollis* (p. 9, type species by monotypy *Anthicus fenestratus* Schmidt, 1842).

13. In a later paper, J.R. Sahlberg (1903c) added a new subgenus *Bifossicollis* (p. 31, type species by monotypy *Anthicus iscarיותes* LaFerté-Sénéctère, 1849).

14. In a later paper, J.R. Sahlberg (1903d) added two new subgenera, *Clavicollis* (p. 55, type species by monotypy *Formicomus oliverii* Desbrochers des Loges, 1868 [as *olivieri*, incorrect subsequent spelling]) and *Tenuicollis* (p. 56, four species included).

15. Pic (1911, p. 30) listed 21 subgenera of *Anthicus* recognized as valid (and two synonyms) for the World fauna, and placed his names *Bissicomus*, *Brevicomus*, *Clavicomus*, *Cordicomus*, *Curticomus*, *Hirticomus*, *Laticomus*, *Pubicomus*, *Sticticomus*, *Tenuicomus* and *Trapezicomus* under the heading 'Verschiedene Abteilungen' [Other divisions], but not as subgenera. The list of World species followed, some of them carrying after their treatment the name of the containing division in

parentheses. Among these, none of these names or of those of Marseul appeared. The only one used (after 16 species) is *Spiniferes*, which was not listed with the other subgenera or divisions. As in the case of *Spinicornes*, *Spiniferes* is a plural name, either vernacular French or a Latin compound adjective in nominative, and is unavailable (Article 11.8). *Spiniferes* was raised to the genus rank by Uhmman (1976) and used by two other authors. The treatment of *Leptaleus* (p. 28) did not include any mention of Ehippicolles.

16. Pic's names were in predominant use for the subgenera of *Anthicus* (and given precedence over Marseul's unavailable names) or sometimes used as genera, while Sahlberg's names were largely overlooked, until Chandler et al. (2004) modified the current nomenclature. After consulting with Dr. A. Smetana 'who pointed out that these names were a French plural form of scientific names that was commonly used in the 1800's and early 1900's', they decided that 'these names can be emended to the nominative singular [Article 11.8.1]'. However, this Article states literally: 'A genus-group name proposed *in Latin text* [my emphasis] but written otherwise than in the nominative singular *because of the requirements of Latin grammar* [my emphasis] is available, provided that it meets the other requirements of availability, but it is to be corrected to the nominative singular.' Marseul's names were proposed in a text written in French, where there were no requirements of Latin grammar. Moreover, if they recognized them as being 'a French plural form of scientific names' they should have excluded them from Zoological Nomenclature under Article 1.3.5, since vernacular names do not form part of Zoological Nomenclature. The only names that could have been proposed originally in a vernacular form are family-group names under the conditions of Article 11.7.2.

This incorrect interpretation of the Code led them to amend without justification 22 names proposed by Marseul, Pic, and Kreckich-Strassoldo, and to take the available names proposed by Sahlberg as justified emendations of Marseul's names without their proper authorship and date.

They considered the following names to have been emended by Sahlberg:

Bifossicolles to *Bifossicollis* Marseul, 1879a, p. 187 [incorrectly as 67] (type species *Anthicus ghilianii* LaFerté-Sénectère, 1849 by original designation.) under synonymy with *Microhoria*. *Bifossicollis* Sahlberg, 1903 was considered a justified emendation of Bifossicolles.

Birricolles to *Birricollis* Marseul, 1879a, p. 67 (type species *Anthicus genei* LaFerté-Sénectère, 1849 by original designation) under synonymy with *Anthicus*. *Birricollis* Sahlberg, 1903 was considered a justified emendation of Birricolles. *Birricomus* Pic, 1894 was considered a replacement name for *Birricollis*.

Brevicolles to *Brevicollis* Marseul, 1879a, p. 67 (type species *Meloe antherinus* Linnaeus, 1760 by original designation) under synonymy with *Anthicus*. *Brevicollis* Sahlberg, 1903 was considered a justified emendation of Brevicolles. *Brevicomus* Pic, 1894 was considered a replacement name for *Brevicollis*.

Clavicolles to *Clavicollis* Marseul, 1879a, p. 66 (type species *Anthicus longiceps* LaFerté-Sénectère, 1849 by original designation) and used it as a valid genus. *Clavicollis* Sahlberg, 1903 was considered a justified emendation of Clavicolles. *Clavicomus* Pic, 1894 was considered a replacement name for *Clavicollis*.

Cordicolles to *Cordicollis* Marseul, 1879a, p. 66 (type species *Anthicus instabilis* Schmid, 1842 by original designation) and used it as a valid genus. *Cordicollis* Sahlberg, 1903 was considered a justified emendation of Cordicolles. *Cordicomus* Pic, 1894 was considered a replacement name for *Cordicollis*.

Hirticolles to *Hirticollis* Marseul, 1879a, p. 67 (type species *Notoxus quadriguttatus* Rossi, 1792 by original designation) and used it as a valid genus. *Hirticollis* Sahlberg, 1903 was considered a justified emendation of Hirticolles. *Hirticomus* Pic, 1894 was considered a replacement name for *Hirticollis*.

Lagenicolles to *Lagenicollis* Marseul, 1879a, p. 66 (type species *Anthicus humilis* Germar, 1824 by original designation) under synonymy with *Cyclodinus* Mulsant & Rey, 1866. *Lagenicollis* Sahlberg, 1903 was considered a justified emendation of Lagenicolles.

Pubicolles to *Pubicollis* Marseul, 1879a, p. 67 (type species *Anthicus axillaris* Schmidt, 1842 by original designation) under synonymy with *Anthicus*. *Pubicollis* Sahlberg, 1903 was considered a justified emendation of Pubicolles. *Pubicomus* Pic, 1894 was considered a replacement name for *Pubicollis*.

Stricticolles to *Stricticollis* Marseul, 1879a, p. 66 (type species *Anthicus longicollis* Schmidt, 1842 by original designation) and used it as a valid genus. *Stricticollis* Sahlberg, 1903 was considered a justified emendation of Stricticolles. *Stricticomus* Pic, 1894 was considered a replacement name for *Stricticollis*.

Tenuicolles to *Tenuicollis* Marseul, 1879a, p. 67 (type species *Anthicus olivaceus* LaFerté-Sénéctère, 1849 by original designation) and used it as a valid genus. *Tenuicollis* Sahlberg, 1903 was considered a justified emendation of Tenuicolles. *Tenuicomus* Pic, 1894 was considered a replacement name for *Tenuicollis*.

Trapezicolles to *Trapezicollis* Marseul, 1879a, p. 66 (type species *Meloe floralis* Linnaeus, 1758 by original designation) under synonymy with *Anthicus*. *Trapezicollis* Sahlberg, 1903 was considered a justified emendation of Trapezicolles. *Trapezicomus* Pic, 1894 was considered a replacement name for *Trapezicollis*.

They also emended:

Biscissicolles to *Biscissicollis* Marseul, 1879a, p. 230 [incorrectly as 67] (type species *Anthicus friwaldskyi* LaFerté-Sénéctère, 1849 by original designation) under synonymy with *Aulacoderus*.

Bitumicolles to *Bitumicollis* Marseul, 1879a, p. 66 (type species *Anthicus turca* Marseul, 1879, by original designation) under synonymy with *Cordicollis*.

Curticolles to *Curticollis* Pic, 1892, p. 44 (type species *Anthicus trotommidens* Pic, 1892, by monotypy) under synonymy with *Anthicus*.

Ephippicolles to *Ephippicollis* Marseul, 1879a, p. 65 (type species *Notoxus rodriguesi* Latreille, 1804) under synonymy with *Leptaleus* LaFerté-Sénéctère, 1849.

Laticolles to *Laticollis* Marseul, 1879a, p. 67 (type species *Anthicus baicalicus* Mulsant & Rey, 1866, by original designation) under synonymy with *Cordicollis*. *Laticomus* Pic, 1894 was considered a replacement name for *Laticollis*.

Recticolles to *Recticollis* Marseul, 1879a, p. 66 (type species *Anthicus inderiensis* Marseul, 1879 by original designation) under synonymy with *Anthicus*.

Rotundicolles to *Rotundicollis* Marseul, 1879a, p. 67 (type species *Anthicus insignis* Lucas, 1843 by original designation) under synonymy with *Liparoderus* LaFerté-Sénéctère, 1849.

Spinicornes to *Spinicornus* Krekich-Strassoldo, 1919, p. 65 (type species by monotypy *Anthicus beckeri* Desbrochers des Loges, 1875, a subjective synonym of *Anthicus humilis* Germar, 1824) under synonymy with *Cyclodinus* Mulsant & Rey, 1866.

Spiniferes to *Spiniferus* Pic, 1911, p. 33 (type species *Anthicus cerastes* Truqui, 1855 by subsequent designation by Chandler et al. (2004, pp. 119, 124) under synonymy with *Cyclodinus* Mulsant & Rey, 1866.

Stenicolles to *Stenicollis* Marseul, 1879a, p. 65 (type species *Anthicus vittatus* Lucas, 1843 by monotypy) under synonymy with *Stenidius* LaFerté-Sénéctère, 1847.

Sulcicolles to *Sulcicollus* Marseul, 1879a, p. 66 (type species *Anthicus giganteus* LaFerté-Sénéctère, 1849, by original designation) under synonymy with *Stricticollis*. This is an incorrect emendation as well, since they depart from changing the ending (from -colles to -collis) to avoid homonymy with *Sulcicollis* Klug, 1833 (Coleoptera) in a peculiar application of what an emendation to singular should be.

They used an incorrect subsequent spelling: *Pseudanthicus*, instead of *Pseudantichus* Desbrochers des Loges, 1868. It is not clear that this is Desbrochers des Loges's inadvertent misspelling, since he used correctly *Anthicus* in his article. Perhaps he was using as the basis for his *Pseudantichus* the long accustomed in France misspelling *Antichus*, used in former French papers by Latreille and others. They misspelled the original single included species *Formicomus oliverii* as *F. olivierii*. They also failed to meet the requirements of reversal of precedence against *Clavicollis* or *Clavicomus* under Article 23.9.1.2, since they merged in a single comparison of use both names, which are nominally different, and failed to 'give evidence that the conditions of Article 23.9.1.2 are met' since they did not list the 25 required works.

Moreover, they used as available the names *Monstrosipedes* Marseul, 1879a, p. 67 (type species by original designation *Anthicus varus* Marseul, 1875, a subjective junior synonym of *Anthicus valgus* Fairmaire, 1875) and *Normalipedes* Marseul, 1879a, p. 68 (type species *Anthicus andalusiacus* LaFerté-Sénéctère, 1849 by original designation) in the synonymy of *Microhoria* Chevrolat, 1877.

They did not treat as available the names Fossicolles Marseul, 1879a, p. 67, considered to be an incorrect alternative spelling of Bifossicolles Marseul, 1879a, p. 187, and Biparticolles Marseul, 1879a, p. 68, considered to be an incorrect alternative spelling of Biscissicolles Marseul, 1879a, p. 230 (they mention Marseul [1887, p. 353] as First Reviser for both names). All these emendations were proposed under synonymy of other genera but these five: *Clavicollis*, *Cordicollis*, *Hirticollis*, *Stricticollis* and *Tenuicollis*, which were used as valid genus names.

17. Three genera present some problems with their typification. The genus *Laticomus* Pic, 1894 has no available type species designation. It originally included two available nominal species: *Notoxus sellatus* Panzer, 1796 and *N. bimaculatus* Illiger, 1801. If the first species were designated, it would become an objective synonym of *Cartolus* Mulsant & Rey, 1866; if the second, it would become an objective synonym of *Eonius* C.G. Thomson, 1859, so this genus will never be used. I hereby designate *Notoxus bimaculatus* Illiger, 1801 as its type species.

A different case is the one presented by *Tenuicomus* Pic, whose only type species designation of *Anthicus ocreatus* LaFerté-Sénéctère, 1847 by Bucciarelli (1980, p. 185) is invalid, not being an originally included species. This species was included in this group just in the second part of Pic's (1894b) catalogue. The only two original species are *A. pumilus* Baudi, 1877 and *A. versicolor* Kiesenwetter, 1866 (now in *Clavicomus*), two more species were considered to belong to a possibly different group (Article 67.2.5). Consequently, I hereby select as type species *A. pumilus* Baudi, 1877, currently a junior synonym of *Tenuicomus pauperculus* (LaFerté-Sénéctère, 1847).

Finally, *Trapezicomus* Pic has no type species designation. I select here as type species the first mentioned by Pic (1894a, p. 45), namely, *Anthicus rufivestis* Marseul, 1879. This name becomes thus a junior subjective synonym of *Anthicus* Paykull and remains useful if needed in the future.

18. Previous to Chandler et al.'s (2004) paper, some of Marseul's plural names were used only by Krekich-Strassoldo (1911), Schatzmayr & Koch (1934), Koch (1935) and Winkler (1927), some names were never used, and only Spiniferes has known a little wider use either as a genus or subgenus (Uhmann, 1976, 1978, 1985, 1992a, 1992b, 1998; Whitehead, 1993; Telnov, 2002). The introduction of these emendations wrongly attributed to Marseul since 2004 in this widely referenced article and in Chandler et al. (2008) has started a destabilization of the generic nomenclature of the ANTHICIDAE, creating in one case useless names because they are thought to be objective synonyms and in the other case names that have displaced others in common use for more than one century since their inception. The incorrect interpretation of the Code has resulted in 19 unavailable names originally created as 'groupes d'espèces' by Marseul (1879a) having been considered at one time or another names available in the genus-group, even if they are clearly plural names. The 12 names correctly created by Pic (1892, 1894a, b) and in use since their creation have been synonymized with emendations of these names under an incorrect interpretation of Article 11.8.1 of the Code: these plural names have been converted into singular using a provision that allows this only in cases where the names were published in a Latin text under the rules of Latin grammar, whereas they were in fact proposed in a French text. This has led also to the disappearance as 'emendations' of 11 names correctly proposed by Sahlberg (1903a, b, c, d) and to other irregularities as mentioned above. None of the names used by Chandler et al. (2004) can be attributed to these authors since, excepting *Clavicollis*, *Cordicollis*, *Hirticollis*, *Stricticollis* and *Tenuicollis*, they have been treated as available in synonymy (contravening the provisions of Article 11.6.3) and these five because they contravene the mandatory provisions of Article 16.1. The Commission is asked to rule in order to prevent a future extension of the irregular usage of these unavailable names. Regarding the type species for every genus, since author and date are not part of the genus name (Article 51.1), and the identity of concept of the available names and their emendations is strict, I have accepted those designated using an incorrect authority and date as having been designated for the name having a correct authorship and date, mainly in Sahlberg's case, provided that the designated species were originally included (Article 67.7). With the following proposal, only four names (*Biscissicollis*, *Bitumicollis*, *Recticollis*, *Spiniferus*) are lost, but they are not preoccupied if there is a need for them to be described again in the future for genera or

subgenera. A list of 85 uses of Pic's names (1895–2010) and of 20 uses of Chandler et al.'s names (2004–2012), the latter mainly by the three authors of the proposal, has been deposited with the Secretariat of the Commission.

19. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to confirm that the names Ehippicolles, Stenicolles (p. 65), Sulcicolles, Reticolles, Lagenicolles, Bitumicolles, Trapezicolles, Cordicolles, Stricticolles, Clavicolles (p. 66), Hirticolles, Brevicolles, Tenuicolles, Pubicolles, Birricolles, Rotundicolles, Laticolles, Fossicolles, Monstrosipedes (p. 67), Normalipedes, Biparticolles (p. 68), Bifossicolles (p. 187) and Biscissicolles (p. 230), all of Marseul (1879), the names Curticolles Pic (1892, p. 44) and Spiniferes Pic (1911, p. 33) and the name Spinicornes Krekich-Strassoldo (1919, p. 65), are unavailable under Articles 11.8 and 11.8.1 of the Code and cannot be emended to make them available;
- (2) to use its plenary power to rule that the name *Clavicomus* Pic, 1894 is to be given precedence over *Pseudantichus* Desbrochers des Loges, 1868, whenever the two are considered to be synonyms;
- (3) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Anthicus* Paykull, 1798 (gender: masculine), type species by subsequent designation by Westwood (1830) *Meloe antherinus* Linnaeus, 1760, type genus of the family-group ANTHICIDAE;
 - (b) *Bifossicollis* Sahlberg, 1903 (gender: masculine), type species by monotypy *Anthicus iscarיותes* LaFerté-Sénéctère, 1849;
 - (c) *Birricomus* Pic, 1894 (gender: masculine), type species by subsequent designation by Chandler et al. (2008) *Anthicus genei* LaFerté-Sénéctère, 1849;
 - (d) *Clavicomus* Pic, 1894 (gender: masculine), type species by subsequent designation by Bucciarelli (1980) *Anthicus longiceps* LaFerté-Sénéctère, 1849, with the endorsement that it is to be given precedence over *Pseudantichus* Desbrochers des Loges, 1868, whenever they are considered to be synonyms as ruled in (2) above;
 - (e) *Cordicomus* Pic, 1894 (gender: masculine), type species by subsequent designation by Bonadona (1958) *Anthicus instabilis* Schmidt, 1842;
 - (f) *Curticomus* Pic, 1894 (gender: masculine), type species by monotypy *Anthicus trotommidens* Pic, 1892;
 - (g) *Cyclodinus* Mulsant & Rey, 1866 (gender: masculine), type species by subsequent designation by Bonadona (1949) *Anthicus humilis* Germar, 1824;
 - (h) *Hirticomus* Pic, 1894 (gender: masculine), type species by subsequent designation by Bonadona (1958) *Notoxus hispidus* Rossi, 1792;
 - (i) *Microhoria* Chevrolat, 1877 (gender: feminine), type species by subsequent designation by Bonadona (1952) *Anthicus oedipus* Chevrolat, 1860;
 - (j) *Pseudantichus* Desbrochers des Loges, 1868 (gender: masculine), type species by monotypy *Formicomus oliverii* Desbrochers des Loges, 1868, with the endorsement that it is not to be given priority over *Clavicomus* Pic, 1894, whenever they are considered to be synonyms, as ruled in (2) above;

- (k) *Pubicomus* Pic, 1894 (gender: masculine), type species by subsequent designation by Chandler et al. (2008) *Anthicus axillaris* Schmidt, 1842;
 - (l) *Stricticomus* Pic, 1894 (gender: masculine), type species by subsequent designation by Bonadona (1958) *Anthicus transversalis* A. Villa & G.B. Villa, 1833;
 - (m) *Tenuicomus* Pic, 1894 (gender: masculine), type species by present designation *Anthicus pumilus* Baudi, 1877;
 - (n) *Trapezicomus* Pic, 1894 (gender: masculine), type species by present designation *Anthicus rufivestis* Marseul, 1879;
- (4) to place on the Official List of Specific Names in Zoology the following names:
- (a) *antherinus* Linnaeus, 1760, as published in the binomen *Meloe antherinus* (specific name of the type species of *Anthicus* Paykull, 1798);
 - (b) *axillaris* Schmidt, 1842, as published in the binomen *Anthicus axillaris* (specific name of the type species of *Pubicomus* Pic, 1894);
 - (c) *genei* LaFerté-Sénéctère, 1849, as published in the binomen *Anthicus genei* (specific name of the type species of *Birricomus* Pic, 1894);
 - (d) *hispidus* Rossi, 1792, as published in the binomen *Notoxus hispidus* (specific name of the type species of *Hirticomus* Pic, 1894);
 - (e) *humilis* Germar, 1824, as published in the binomen *Anthicus humilis* (specific name of the type species of *Cyclodinus* Mulsant & Rey, 1866);
 - (f) *instabilis* Schmidt, 1842, as published in the binomen *Anthicus instabilis* (specific name of the type species of *Cordicomus* Pic, 1894);
 - (g) *iscariotes* LaFerté-Sénéctère, 1849, as published in the binomen *Anthicus iscariotes* (specific name of the type species of *Bifossicollis* Sahlberg, 1903);
 - (h) *longiceps* LaFerté-Sénéctère, 1849, as published in the binomen *Anthicus longiceps* (specific name of the type species of *Clavicomus* Pic, 1894);
 - (i) *oedipus* Chevrolat, 1860, as published in the binomen *Anthicus oedipus* (specific name of the type species of *Microhoria* Chevrolat, 1877);
 - (j) *oliverii* Desbrochers des Loges, 1868, as published in the binomen *Formicomus oliverii* (specific name of the type species of *Pseudantichus* Desbrochers des Loges, 1868);
 - (k) *pumilus* Baudi, 1877, as published in the binomen *Anthicus pumilus* (specific name of the type species of *Tenuicomus* Pic, 1894);
 - (l) *rufivestis* Marseul, 1879, as published in the binomen *Anthicus rufivestis* (specific name of the type species of *Trapezicomus* Pic, 1894);
 - (m) *transversalis* A. Villa & G.B. Villa, 1833, as published in the binomen *Anthicus transversalis* (specific name of the type species of *Stricticomus* Pic, 1894);
 - (n) *trotommidens* Pic, 1892, as published in the binomen *Anthicus trotommidens* (specific name of the type species of *Curticomus* Pic, 1894);
- (5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
- (a) *Birricollis* Sahlberg, 1903, junior objective synonym of *Birricomus* Pic, 1894;
 - (b) *Brevicomus* Pic, 1894, junior objective synonym of *Anthicus* Paykull, 1798;

- (c) *Brevicollis* Sahlberg, 1903, junior objective synonym of *Anthicus* Paykull, 1798;
- (d) *Clavicollis* Sahlberg, 1903, junior objective synonym of *Pseudantichus* Desbrochers des Loges, 1868;
- (e) *Cordicollis* Sahlberg, 1903, junior objective synonym of *Cordicomus* Pic, 1894;
- (f) *Hirticollis* Sahlberg, 1903, junior objective synonym of *Hirticomus* Pic, 1894;
- (g) *Lagenicollis* Sahlberg, 1903, junior objective synonym of *Cyclodinus* Mulsant & Rey, 1866;
- (h) *Laticomus* Pic, 1894, junior objective synonym of *Eonius* C.G. Thomson, 1859;
- (i) *Pubicollis* Sahlberg, 1903, junior objective synonym of *Pubicomus* Pic, 1894;
- (j) *Stricticollis* Sahlberg, 1903, junior objective synonym of *Stricticomus* Pic, 1894;
- (k) *Tenuicollis* Sahlberg, 1903, junior objective synonym of *Tenuicomus* Pic, 1894;
- (l) *Trapezicollis* Sahlberg, 1903, junior objective synonym of *Trapezicomus* Pic, 1894.

Acknowledgements

Hans Silfverberg (*Zoological Museum, Helsinki, Finland*) is thanked for his comments on Finnish literature, Julio Collado (*Oviedo, Spain*) for calling my attention to this problem and his support during the preparation of the first draft, and Maxwell V. L. Barclay (*The Natural History Museum, London, U.K.*) and Frank-Thorsten Krell (*Denver Museum of Nature and Science, U.S.A.*) for suggestions and improvements to an earlier version of the manuscript. I specially thank Mme Nicole Guillaume (*Société scientifique du Bourbonnais, Moulins, France*) for the bibliographic details and dating of the journal of her Society. Two anonymous reviewers are heartily thanked for their helpful suggestions and remarks.

References

- Bonadona, P.** 1949. Les *Anthicus* français du groupe de *humilis* Germar. *Revue Française d'Entomologie*, **16**(2): 57–64.
- Bonadona, P.** 1952. Notes sur les Anthicides paléarctiques. *Revue Française d'Entomologie*, **19**(4): 233–237.
- Bonadona, P.** 1958. Insectes Coléoptères Anthicidae. *Faune de Madagascar*, **6**: 1–153.
- Bucciarelli, I.** 1980. *Fauna d'Italia. Coleoptera, Anthicidae*. 240 pp. Edizioni Calderini, Bologna.
- Chandler, D.S.** 2010. Anthicidae Latreille, 1819. Pp. 729–741 in Leschen, R.A.B., Beutel, R.G. & Lawrence, J.F. (Eds.), *Coleoptera, Beetles. Volume 2: Morphology and Systematics (Elateroidea, Bostrichiformia, Cucujiformia partim)* in Kristensen, N. P. & Beutel, R.G. (Eds.), *Handbook of Zoology. Arthropoda: Insecta*. xiii + 786 pp. Walter de Gruyter, Berlin, New York.
- Chandler, D.S., Nardi, G. & Telnov, D.** 2004. Nomenclatural notes on the Palearctic Anthicidae (Coleoptera). *Mitteilungen des Internationalen Entomologischen Vereins e. V. (Frankfurt am Main)*, **29**: 109–173.

- Chandler, D.S., Uhmman, G., Nardi, G. & Telnov, D.** 2008. Anthicidae, pp. 421–455. In Löbl, I. & Smetana, A. (Eds.), *Catalogue of Palaearctic Coleoptera*. Volume 5. 670 pp. Apollo Books, Stenstrup.
- Chevrolat, L.A.A.** 1877. Descriptions de coléoptères nouveaux ou peu connus. *Annales de la Société Entomologique de France*, (5)7(2): 167–182.
- Desbrochers des Loges, J.** 1868. Description de deux coléoptères nouveaux des environs de Bône. *Bulletin de l'Académie d'Hippone*, 4 (1865): 77–80.
- Koch, C.** 1935. Wissenschaftliche Ergebnisse der entomologischen Expeditionen seiner Durchlaucht des Fürsten Alessandro C. DELLA TORRE E TASSO nach Aegypten und auf die Halbinsel Sinai. VIII. Anthicidae (Coleoptera). *Bulletin de la Société Royale Entomologique d'Égypte*, 19:132–144.
- Krekich-Strassoldo, H. von.** 1911. Gli Anticidi del Litorale e della Dalmazia. *Bollettino della Società Adriatica di Scienze Naturale in Trieste*, 8: 63–79, pl. 1.
- Krekich-Strassoldo, H. von.** 1919. Über *Anthicus humilis* Germ. und verwandte Arten. *Coleopterologische Rundschau*, 8: 60–76.
- LaFerté-Senectère, F.T. de.** 1849a. In Guérin-Méneville, F.-E. (ed.). *Species et iconographie générique des animaux articulés ou représentation des genres, avec leur description et celle de toutes les espèces de cette grande division du règne animal. Première Partie: Insectes Coléoptères*. (1846–1847). Paris: de Fain et Thunot. Livraison 4 (No. 21, Notoxus, 36 pp., 1 pl.; No. 22, Mecynotarsus, 5 pp., 1 pl.), Livraison 5 (No. 18, Stereopalpus, 3 pp., 1 pl.; No. 20, Macrarthrius, 10 pp., 1 pl.), Livraison 6 (No. 23, Amblyderus, 3 pp., 1 pl.; No. 24, Anthelephilus, 5 pp., 1 pl.), Livraison 7 (No. 25, Formicomus, 25 pp., Erratum, 1 pl.; No. 26, Tomoderus, 8 pp., 1 pl.; No. 27, Anthicus (Première Division), pp. 1–45, 1 pl.), Livraison 8 (No. 28, Anthicus (Seconde Division), pp. 47–83, 1 pl.; No. 29, Anthicus (Troisième Division), pp. 85–132, 1 pl.), Livraison 9 (Anthicus (Quatrième Division), pp. 133–181, 1 pl.; No. 31, Ochthenomus, 9 pp., 1 pl.).
- LaFerté-Senectère, F.T. de.** 1849b. *Monographie des Anthicus et genres voisins, coléoptères hétéromères de la tribu des Trachélides*. [1848]. xxii + 340 pp., 16 pl. Author, Paris.
- Marseul, S. de.** 1879. Monographie des Anthicides de l'Ancien-Monde. *L'Abeille*, 17: 1–268 + pl. I-II [special pagination].
- Marseul, S. de.** 1879b. [Note]. *Nouvelles et faits divers de L'Abeille*, (2) 26: 101.
- Marseul, S. de.** 1887. Catalogue des Coléoptères de l'Ancien-Monde, Europe et contrées limitrophes en Afrique et en Asie. [Suite]. *L'Abeille*, 24: 193–360.
- Mulsant, E. & Rey, C.** 1866a. *Histoire naturelle des coléoptères de France. Volume 17. Colligères*. [4], 188 pp., 3 pls. F. Savy, Paris.
- Mulsant, E. & Rey, C.** 1866b. Histoire naturelle des coléoptères de France. Tribu des colligères. *Annales de la Société Linnéenne de Lyon*, (N.S.) 13: 89–282.
- Paykull, G. von.** 1798. *Fauna Suecica. Insecta. Tomus I*. [8] + 358 + [2] pp. Joh. F. Edman, Uppsala.
- Pic, M.** 1892. Anthicus algériens. Miscellanea. *Entomologica*, 1(7): 43–44.
- Pic, M.** 1894a: Catalogue géographique des anthicides de France, Corse, Algérie et Tunisie (Suite). *Revue scientifique du Bourbonnais et du Centre de France*, 7(74): 40–49.
- Pic, M.** 1894b: Catalogue géographique des anthicides de France, Corse, Algérie et Tunisie (Suite). *Revue scientifique du Bourbonnais et du Centre de France*, 7(75): 69–79.
- Pic, M.** 1895. Observations et renseignements divers. *L'Échange, Revue Linnéenne*, 11:51–53.
- Pic, M.** 1911. Anthicidae, Pars 36 in Schenkling, S. (Ed.), *Coleopterorum Catalogus*. 102 pp. W. Junk, Berlin.
- Sahlberg, J.R.** 1903a. Messis hiemalis Coleopterorum Corcyraeorum. Enumeratio Coleopterorum mensibus Novembri – Februario 1895–1896 et 1898–1899 nec non primo vere 1896 in insula Corcyra collectorum. *Öfversigt af Finska Vetenskaps-Societetens Förhandlingar*, 45A(11) [1902–1903]: 1–85.
- Sahlberg, J.R.** 1903b. Ad cognitionem faunae Coleopterorum Graecae fragmenta. *Öfversigt af Finska Vetenskaps-Societetens Förhandlingar*, 45A(12) [1902–1903]: 1–9.
- Sahlberg, J.R.** 1903c. Coleoptera Levantina mensibus Februario et Martio 1896 Palaestina et Aegypto inferiore collecta. *Öfversigt af Finska Vetenskaps-Societetens Förhandlingar*, 45A(18) [1902–1903]: 1–36.

- Sahlberg, J.R.** 1903d. Coleoptera Numido-Punica mensibus Martio, Aprili et Majo 1899 in Tunisia et Algeria orientali collecta. *Öfversigt af Finska Vetenskaps-Societetens Förhandlingar*, **45A**(19) [1902–1903]: 1–70.
- Schatzmayr, A. & Koch, C.** 1934. Wissenschaftliche Ergebnisse der entomologischen Expeditionen seiner Durchlaucht des Fuersten Alexander C. DELLA TORRE E TASSO nach Aegypten und auf die Halbinsel Sinai. *Bulletin de la Société Royale Entomologique d'Egypte*, [1933] **17**: 204–242, pl. 12.
- Telnov, D.** 2002. Vorläufige Auflistung der Anthicidae (Coleoptera) von Afghanistan mit Beschreibung einer neuen Art. *Latvijas Entomologs*, **39**: 20–29.
- Thomson, C.G.** 1864. *Skandinaviens Coleoptera, synoptiskt bearbetade*, vol. 6. 385 pp. Lundbergiska Boktryckeriet, Lund.
- Uhmann, G.** 1976. Die Gattungen der Anthicidae und ihre systematische Anordnung. *Entomologische Blätter*, **72**(3): 166–182.
- Uhmann, G.** 1978. Die Gattungen der Anthicidae und ihre systematische Anordnung. Teil 2. Die Systematische Anordnung. *Entomologische Blätter*, **74**(1–2): 75–80.
- Uhmann, G.** 1985. Paläarktische Anthiciden (Coleoptera) des Ungarischen Naturwissenschaftlichen Museums Budapest. *Folia Entomologica Hungarica*, **46**: 177–203.
- Uhmann, G.** 1992a. Die Anthicidae der Iberischen Halbinsel. *Mitteilungen der Münchner Entomologischen Gesellschaft*, **82**: 87–180.
- Uhmann, G.** 1992b. 75. Familie: Anthicidae. Pp. 188–189 in Lohse, G.A. & Lucht, W.A. (Eds.), *Die Käfer Mitteleuropas. 2. Supplementband mit Katalogteil. Band 13*. 375 pp. Goecke & Evers, Krefeld.
- Uhmann, G.** 1998. Anthicidae (Insecta: Coleoptera) from Saudi Arabia with the description of a new species. *Fauna of Arabia*, **17**: 93–105.
- Westwood, J.O.** 1830. Observations upon the Notoxidae, a family of Coleopterous Insects, with characters of two new British genera separated therein. *The Zoological Journal*, **5**(17): 57–61, pl. 41.
- Whitehead, P.F.** 1993. Observations on Coleoptera of Mallorca, Balearic Islands. *Bolletí de la Societat d'Història Natural de les Balears*, **36**: 45–56.
- Winkler, A.** 1927. *Catalogus Coleopterorum Regionis Palaearcticae*, Pars 7. Pp. 753–880. A. Winkler, Wien.

Acknowledgement of receipt of this application was published in BZN **70**: 70.

Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).